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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,180	09/17/2003	Jeffrey Bernard Fortin	131200-1	8789

7590 01/26/2005

General Electric Company
CRD Patent Docket Rm 4A59
Bldg. K-1
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Schenectady, NY 12301

EXAMINER	
BASICHAS, ALFRED	

ART UNIT	PAPER NUMBER
3749	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8A

Office Action Summary	Application No.	Applicant(s)	
	10/666,180	FORTIN ET AL.	
	Examiner	Art Unit	
	Alfred Basichas	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 6, 7, 9-14, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charron (4,770,161), which discloses substantially all of the claimed limitations. Charron discloses a burner system including, among other things, a gas burner 43, micro-electro-mechanical valves 37,39, and a controller with modulation (see at least col. 5, lines 4-19). Charron does not specifically recite a plurality of burners or a plurality of independently controllable valves in parallel. Official Notice is given that such an arrangement of valves and burners is old and well known in the art. Such an arrangement has the clear and obvious benefit of providing for enhanced control of fuel flow and combustion. It should be noted that while the prior art may not specifically recite micro-valves in such an arrangement in relation to burners it is not unobvious. It has been held that it is within the general skill of one of ordinary skill in the art to select a known structure on the basis of its suitability for the intended use. The mere possibility that such has not been disclosed before does not make it unobvious. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the claimed arrangement into the invention disclosed by Charron, so as to provide for enhanced control of fuel flow and combustion because it is within the general skill of one of ordinary skill in the art to select a known structure on the basis of its suitability for the intended use.

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charron (4,770,161), which discloses substantially all of the claimed limitations.

Charron does not specifically recite the relative position of the valve to the burner. This position is an obvious modification based on design choice, and depends on spatial considerations. The lack of criticality is evidenced by the recitation of both internal and remote locations. In view of the absence of criticality for this particular design, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate it into the invention disclosed by Charron, so as to provide for spatial considerations.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charron (4,770,161), which discloses substantially all of the claimed limitations. Charron does not specifically recite a plurality of burners. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a plurality of burners into the invention disclosed by Charron, since it has been held that to provide duplicate parts for multiplied effect is not the type of innovation for which a patent is granted. *St. Regis Paper Co. v. Bemis Co., Inc.*, 193 USPQ 8, 11.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Charron (4,770,161), which discloses substantially all of the claimed limitations. Charron does not specifically recite an electronic interface. Official Notice is given that an electronic interface (i.e. thermostat, laptop, pc, palm pilot) is old and well known in the art. Such an arrangement has the clear and obvious benefit of providing for controlling the burner by controlling the amount of gas provided thereto. Being a heater, a wall mounted electronic thermostat would be well within the skill and knowledge of, if not inherent to, a skilled artisan. Accordingly, it would have been obvious to one of ordinary skill in the art

at the time of the invention to incorporate a thermostat into the invention disclosed by Charron, so as to provide for temperature control.

8. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charron (4,770,161), which discloses substantially all of the claimed limitations. Charron does not specifically recite the claimed range. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the claimed range into the invention disclosed by Charron, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

9. Claims 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charron (4,770,161), which discloses substantially all of the claimed limitations. Charron does not specifically recite the use of the burner system in a cooking appliance. Official Notice is given that cooking appliances including burners with gas valves are old and well known in the art. Such an arrangement has the clear and obvious benefit of providing for controlling the burner by controlling the amount of gas provided thereto and thereby controlling the cooking rate of the culinary item. Furthermore, intended use of a known device is not something for which a patent is granted. Especially in the absence of any structure to facilitated the intended use. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a thermostat into the invention disclosed by Charron, so as to provide for temperature control.

Response to Arguments

10. Applicants' arguments with regard to the rejected claims, filed December 6, 2004, have been considered, but are not deemed fully persuasive and are deemed moot in view of new grounds for rejection.

a. Applicants have amended the claims to recite plural independently controlled micro-valves in parallel. Accordingly, the claims have been rejected under new grounds. Specifically, the rejection now addresses the claimed arrangement of plural independently controlled micro-valves in parallel. It cannot be emphasized enough, that while the prior art may not specifically recited the use of micro-valves in the broadly claimed arrangement, such does not make it unobvious. The prior art shows the use of at least a single micro-valve with a burner, and it is notoriously old and well known to use regular valves with burners. It is also notoriously well known to provide an arrangement of plural burners with plural independently controlled valves arranged in parallel. To substitute micro-valves for regular valves is simply not an unobvious step, as it is well within the general skill of one of ordinary skill in the art to select a known structure on the basis of its suitability for the intended use. Since it is known that micro-valves are suitable substitutes for regular valves in use with burners, it would have been obvious to use micro-valves in an arrangement that uses regular valves.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 703 306 3476. The examiner can normally be reached on Monday through Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308 1935. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0861.

January 24, 2005

Alfred Basichas
Primary Examiner
703 306 3476